

PATENT ABSTRACTS OF JAPAN

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(21)Application number : 61-139605 (71)Applicant : SEIKO EPSON CORP

(22)Date of filing : 16.06.1986 (72)Inventor : ARIGA SHUJI

(54) PROJECTION TYPE DISPLAY DEVICE

(57)Abstract:

PURPOSE: To reduce optical loss at the time of optically modulating a TN liquid crystal light valve as low as possible, to improve light using efficiency and to obtain a projection image with high luminance by using a dichroic prism having selective polarized light separating characteristics in addition to color selective reflection characteristics for color separation and color synthesis.

CONSTITUTION: The titled device is constituted of an illuminating system, a dichroic mirror system for separating white light into color beams, a TN liquid crystal light valve 207 for forming an image by using plural color beams, a dichroic mirror system for synthesizing the color beams, and a projecting optical system. The dichroic mirror systems for color synthesis and color separation are dichroic prisms 202, 208 having polarized light separating characteristics selectively reflecting incident polarized light having a polarizing axis almost vertical to an incident plane on the dichroic mirror surface. Since the

